

REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Claims 1-15 are pending in the application. In response to the April 20, 2005 Office Action, Applicant respectfully submits that the pending claims define patentable subject matter.

Claims 1-7, 10-13 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyles et al. (U.S. Patent No. 5,917,822; hereafter “Lyles”) in view of Wallmeier (U.S. Patent No. 6,553,033). Claims 8, 9 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyles in view of Wallmeier and Ding et al. (U.S. Patent No. 5,699,361; hereafter “Ding”). Applicant respectfully traverses the prior art rejections.

With regard to independent claims 1, 7 and 13, the Examiner asserts that Lyles discloses all of the features of the claims except for “the allocation of resources by the management unit is independent of the number of connections of each terminal, and each terminal includes means for allocating resources to each connection according to the overall resources allocated to the terminal by the management.” However, the Examiner asserts that it would have been obvious to modify Lyles to include these features in view of the alleged teachings of Wallmeier “for the purpose of preventing a loss of ATM cells.”¹

Applicant submits that Lyles does not disclose a telecommunication system in which calls (effected by cells or packets) are made from terminals to a connection station and each terminal includes a plurality of connections. Instead, Lyles discloses a shared-media network (i.e., a cable television network), wherein a network access unit or terminal equipment (i.e., a set-

¹ April 20, 2005 Office Action at pages 2-4.

top box or a personal computer with a cable modem) transmits and receives data over the network in accordance with resources allocated to the network access unit by a bandwidth allocation unit (or head-end controller).

Although the Examiner cites Fig. 2 in support of the assertion that Lyles discloses the terminal equipment includes a plurality of channels, the virtual downstream channel 200 and virtual upstream channel 205 are channels multiplexed over a single physical transmission cable 120 (i.e., a single connection) between the terminal equipment 210 (i.e., a cable modem or a television set-top box) and a head-end controller 105. That is, Lyles does not teach or suggest that the terminal equipment has a plurality of incoming connections providing cells or packets used to effect said calls to said connection station. In other words, Lyles' terminal units (i.e., personal computers) only transmit data from a single source/connection, i.e., the data which is generated by the terminal equipment unit itself. For this reason, Lyles teaches that the bandwidth allocation unit / head-end controller (which the Examiner asserts corresponds to the claimed management unit), rather than the network access units / terminal equipment units (which the Examiner asserts corresponds to the claimed terminals), uses a weighted fair queuing algorithm or a virtual clock algorithm to generate a sequence of upstream slot/transmission assignment grants which the bandwidth allocation unit can transmit downstream to the requesting network access unit.

Accordingly, one of ordinary skill in the art would not have been motivated, based on the teachings of Wallmeier, to modify the terminal equipment of Lyles to include "means for allocating the resources to each connection according to the overall resources that are allocated

to said terminal and a weighting coefficient allocated to each connection of said terminal”, as required by claims 1, 7 and 13.

With regard to dependent claims 8, 9 and 14, the Examiner again cites Ding (col. 18, line 66 - col. 19, line 18) for transmitting resource allocation signals which indicate the number of packets to be transmitted for each transmit channel. However, Applicant again respectfully submits that one of ordinary skill in the art would not have been motivated to modify the network/method of Lyles based on the teachings of Ding to produce the claimed invention.² In particular, Ding is directed to allocating internal channels of a host computer (i.e., a node) as needed by application programs running on a processor of the host computer. Accordingly, the resource allocation signal of Ding is transmitted by an application to a (streamer) process running on the same host computer. On the other hand, Lyles teaches transmitting a transmission authorization request signal from a terminal unit to a head-end unit. Thus, Applicant respectfully submits that the teachings of Ding relied on by the Examiner are not related or relevant to the system/method of Lyles or the present invention.

Accordingly, Applicant respectfully submits that independent claims 1, 7 and 13, as well as dependent claims 2-6, 8-12, 14 and 15, should be allowable over the cited references because the cited references, alone or in combination, do not teach or suggest all of the features of the claims, and one of ordinary skill in the art would not have been motivated to combine and modify the cited references to produce the claimed inventions.

² The Examiner has not yet addressed Applicant’s argument regarding Ding.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/808,025

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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